

Appln No. 10/827,531
Reply to the Office Action of June 6, 2005

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-37. (Canceled)

Claim 38. (Currently Amended) A composite compound of mineral or organic fillers or pigments, which comprises:

- a) a combination of at least two mineral or organic fillers or pigments, at least one of which has a surface with at least one hydrophilic site and the other at least has at least one organophilic site co-structured or co-adsorbed by being blended with
- b) at least one binding agent that is supported by a gas.

Claim 39. (Previously Presented) The composite compound as claimed in claim 38, which is in the form of an aqueous composition.

Claim 40. (Previously Presented) The composite compound as claimed in claim 38, which is in the form of a non-aqueous composition.

Claim 41. (Previously Presented) The composite compound as claimed in claim 38, which is in the form of a dry compound.

Claim 42. (Previously Presented) The composite compound as claimed in claim 38, wherein the binding agent is an organic compound.

Claim 43. (Canceled)

Claim 44. (Previously Presented) The composite compound as claimed in claim 38, wherein the binding agent is selected from the group consisting of acrylic polymers, vinyl polymers, their copolymers, their polycondensates, or the polyaddition products, in their free acid state or partially neutralized, or totally neutralized, of at least one of the monomers acrylic acid, methacrylic acid, itaconic, crotonic, fumaric acid, maleic anhydride, isocrotonic acid, aconitic acid, mesaconic acid, sinapic acid, undecylenic acid, angelic acid, their respective esters, acrylamido methyl propane sulphonic acid, acrolein, acrylamide and/or methacrylamide, methacrylamido propyltrimethyl ammonium chloride or sulphate, methacrylate of trimethylammonium ethyl chloride or sulphate, their acrylate and acrylamide counterparts, quaternized or not, dimethyldiallyl ammonium chloride and vinylpyrrolidone, or a binding agent selected from group consisting of the linear or branched fatty acids, the linear or branched fatty alcohols, the linear or branched or cyclic fatty amines, saturated or unsaturated, or a binding agent selected from the group consisting of the linear or branched fatty chain quaternary ammonium salts.

Claim 45. (Previously Presented) The composite compound as claimed in claim 38, wherein the binding agent is selected from the group consisting of acrylic or vinyl polymers

and/or copolymers in their free acid state or partially neutralised, or totally neutralised, obtained by polymerization, in the acid state in the presence of at least one of the mineral or organic particles of the composite compound and optionally in the presence of the binding agent as claimed in claim 44.

Claim 46. (Previously Presented) The composite compound as claimed in claim 38, wherein the mineral or organic filler or fillers and pigment or pigments having a surface with at least one hydrophilic site are selected from the group consisting of chalk, calcite, marble, the dolomites, crystalline or amorphous aluminum hydroxides, synthetic or natural precipitated silicates, calcium sulphate, titanium dioxides, satin white, the wollastonites, huntite, calcined clays, starch and organophilic organic or mineral particles having at least one hydrophilic site.

Claim 47. (Previously Presented) The composite compound as claimed in claim 38, wherein the mineral or organic filler or fillers and pigment or pigments having a surface with at least one organophilic site are selected from the group consisting of the talcs, micas, clays, zinc oxide, transparent iron pigments, colouring pigments, synthetic pigments with a polystyrene base, urea-formol resins, carbon black, the fibres and flour of cellulose and hydrophilic mineral or organic particles having at least one organophilic site.

Claim 48. (Previously Presented) The composite compound as claimed in claim 38, which contains 0.1 % to 99.0 % by dry weight, relative to the total dry weight of the fillers or

pigments, of mineral or organic fillers or pigments having a surface with at least one hydrophilic site and 99.9 % to 0.1 % by dry weight, relative to the total dry weight of the fillers or pigments, of mineral or organic fillers or pigments having a surface with at least one organophilic site.

Claim 49. (Previously Presented) The composite compound as claimed in claim 38, which contains 0.01 % to 10.0 % dry weight of the binding agent relative to the total dry weight of the fillers or pigments.

Claim 50. (Currently Amended) A composite compound of mineral or organic fillers or pigments, which comprises:

a) a combination of at least two mineral or organic fillers or pigments, at least one of which has a surface with at least one hydrophilic site and the other at least has at least one organophilic site co-structured or co-adsorbed by being blended with

b) at least one binding agent, the resulting The composite compound as claimed in claim 38, which is being macroscopically homogeneous.

Claim 51. (Previously Presented) The composite compound as claimed in claim 38, whose yield stress is higher than that of the standard mixture of corresponding fillers or pigments.

Claims 52-54. (Canceled)

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Claim 55. (Currently Amended) An aqueous suspension of mineral or organic fillers or pigments, which comprises a composite compound as claimed in claim 38.

Claim 56. (Previously Presented) The aqueous suspension of mineral or organic fillers or pigments as claimed in claim 55, which is macroscopically homogeneous.

Claim 57. (Previously Presented) The aqueous suspension of mineral or organic fillers or pigments as claimed in claim 55, whose yield stress is higher than that of the standard mixture of fillers or pigments.

Claim 58. (Previously Presented) A paper coating color which comprises a composite compound as claimed in claim 38.

Claim 59. (Currently Amended) The A paper coating color which comprises a composite compound as claimed in claim 50 58, which is macroscopically homogeneous.

Claim 60. (Previously Presented) The paper coating color as claimed in claim 58, whose yield stress is higher than the standard mixture of fillers or pigments.

Claim 61. (Previously Presented) The paper coating color as claimed in claim 58, which has a higher light scattering coefficient S than that of a coating color containing the standard suspensions of the corresponding mixtures.

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Claim 62. (Previously Presented) The paper coating color as claimed in claim 58, which has a higher whiteness, determined in accordance with the TAPPI T452 ISO 2470 standard, than that of a coating color containing standard suspensions of the corresponding mixtures.

Claim 63. (Previously Presented) The paper coating color as claimed in claim 58, which has a higher brightness, TAPPI 75°, than that of a coating color containing the standard suspensions of corresponding mixtures.

Claim 64. (Previously Presented) The paper coating color as claimed in claim 58, whose curve, determined in accordance with the ISIT printability test and representative of the tack force as a function of time, has smaller rising and falling gradients than coating colors containing the standard suspensions of the corresponding mixtures and a higher maximum value in terms of tack force.

Claim 65. (Previously Presented) The paper coating color as claimed in claim 58, which has a higher print density than that of a coating color containing the standard suspensions of the corresponding mixtures.

Claim 66. (Previously Presented) A paper surface-treatment compound or an aqueous paint or a non-aqueous composition which contains a composite compound as claimed in claim 38.

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Claim 67. (Currently Amended) The A paper surface-treatment compound or an aqueous paint or a non-aqueous composition which contains a composite compound as claimed in claim 50 66 which is macroscopically homogeneous.

Claim 68. (Previously Presented) The paper surface-treatment compound as claimed in claim 66, whose yield stress is higher than that of the standard corresponding mixture of fillers or pigments.

Claim 69. (Previously Presented) The aqueous or non-aqueous paint composition as claimed in claim 66, which has a higher light scattering coefficient S than that of a paint composition containing the standard suspensions of the corresponding mixtures.

Claim 70. (Previously Presented) The paper surface-treatment compound as claimed in claim 66, whose curve, determined in accordance with the ISIT printability test and representative of the tack force as a function of time, has smaller rising and falling gradients than coating colors containing the standard suspensions of the corresponding mixtures and a higher maximum value in terms of tack force.

Claim 71. (Previously Presented) An uncoated filling composition which contains a composite compound as claimed in claim 38.

Claims 72-74. (Canceled)

Claim 75. (Previously Presented) The composite compound as claimed in claim 48, which contains 25 % to 95.0 % by dry weight, relative to the total dry weight of the fillers or pigments, of mineral or organic fillers or pigments having a surface with at least one hydrophilic site and 75 % to 5 % by dry weight, relative to the total dry weight of the fillers or pigments, of mineral or organic fillers or pigments having a surface with at least one organophilic site.

Claim 76. (Previously Presented) The composite compound as claimed in claim 49, which contains 25 % to 95 % dry weight of the binding agent relative to the total dry weight of the fillers or pigments.

Claim 77. (Previously Presented) The composite compound as claimed in claim 51, whose yield stress is at least four times higher than that of the standard mixture of corresponding fillers or pigments.

Claim 78. (Previously Presented) The aqueous suspension of mineral or organic fillers or pigments as claimed in claim 55, whose yield stress is at least four times-higher than that of the standard mixture of corresponding fillers or pigments.

Claim 79. (Previously Presented) The paper coating color as claimed in claim 58 whose yield stress is at least four times higher than the corresponding standard mixture of fillers or pigments.

Claim 80. (Previously Presented) The paper surface-treatment compound as claimed in claim 66, whose yield stress is at least four times higher than that of the standard corresponding mixture of fillers or pigments.

Claim 81. (Currently Amended) A composite compound of mineral or organic fillers or pigments, which comprises:

- a) a combination of at least two mineral or organic fillers or pigments, at least one of which has a surface with at least one hydrophilic site and the other at least has at least one organophilic site co-structured or co-adsorbed by being blended with
- b) at least one binding agent selected from the group consisting of acrylic or vinyl polymers and/or copolymers or polycondensates or polyaddition products in their free acid state or partially neutralized or totally neutralized by neutralizing agents containing monovalent or polyvalent cations or mixtures thereof, by one at least of the monomers of acrylic acid and/or methacrylic, itaconic, crotonic, fumaric acid, isocrotonic, aconitic, mesaconic, sinapic, undecylenic, angelic acid and/or the respective esters thereof, maleic anhydride, acrylamido methyl propane sulphonic acid, acrolein, acrylamide and/or methacrylamide, methacrylamido propyltrimethyl ammonium chloride or sulphate, methacrylate of trimethylammonium ethyl chloride or sulphate, their acrylate and acrylamide counterparts, optionally quaternised, and/or dimethyldiallyl ammonium chloride and vinylpyrrolidone or selected from the group consisting of the linear or branched fatty acids, the linear or branched fatty alcohols, the linear or branched fatty amines, optionally saturated, and linear or branched fatty chain quaternary ammonium salts that is supported by a gas.

Claim 82. (New) A composite compound of mineral or organic fillers or pigments, which comprises:

- a) a combination of at least two mineral or organic fillers or pigments, at least one of which has a surface with at least one hydrophilic site and the other at least has at least one organophilic site co-structured or co-adsorbed by being blended with
- b) at least one binding agent selected from the group consisting of acrylic or vinyl polymers and/or copolymers or polycondensates or polyaddition products in their free acid state or partially neutralized or totally neutralized by neutralizing agents containing monovalent or polyvalent cations or mixtures thereof, by one at least of the monomers of acrylic acid and/or methacrylic, itaconic, crotonic, fumaric acid, isocrotonic, aconitic, mesaconic, sinapic, undecylenic, angelic acid and/or the respective esters thereof, maleic anhydride, acrylamido methyl propane sulphonic acid, acrolein, acrylamide and/or methacrylamide, methacrylamido propyltrimethyl ammonium chloride or sulphate, methacrylate of trimethylammonium ethyl chloride or sulphate, their acrylate and acrylamide counterparts, optionally quaternised, and/or dimethyldiallylammamonium chloride and vinylpyrrolidone or selected from the group consisting of the linear or branched fatty acids, the linear or branched fatty alcohols, the linear or branched fatty amines, optionally saturated, and linear or branched fatty chain quaternary ammonium salts, the resulting composite compound being macroscopically homogeneous.